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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,180	01/26/2004	Laurent H. Andriantsiferana	062891.1235	3690

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BAKER BOTTS L.L.P.  
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DALLAS, TX 75201-2980

EXAMINER
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RUTKOWSKI, JEFFREY M

ART UNIT	PAPER NUMBER
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2419

NOTIFICATION DATE	DELIVERY MODE
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10/22/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/766,180	<b>Applicant(s)</b> ANDRIANTSIFERANA, LAURENT H.	
	<b>Examiner</b> JEFFREY M. RUTKOWSKI	<b>Art Unit</b> 2419	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-10,12-16,18-22 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-10,12-16,18-22 and 24-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

**Claims 3, 4, 11, 17 and 23** have been cancelled.

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/22/2008 has been entered.

#### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the structure for performing the means in **claims 15-16 and 18-20** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first and second paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 15-16 and 18-20** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not adequately describe the structure that is used to perform the means recited in the claims (83 USPQ2d 1118 (Fed. Cir. 2007)).

5. **Claims 1-2, 5-10, 12-14, 15-16, 18-20, 21-22 and 24-26** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. It is unclear what is meant by “...signaling information associated with the communications link...” in the independent **claims 1, 9, 15 and 21** because the signaling information only contains information associated with an end user. The Examiner has given the

phrase the interpretation that the signaling information is received through the communication link.

7. The recognizing of the end user belonging to a designated multicast service feature in independent **claims 1, 9, 15 and 21** is also unclear because it suggests the multicast service group is associated with an end user. The specification suggests the multicast service group is associated with a particular type of service [**Specification, page 15 lines 15-20**].

8. **Claims 15-16 and 18-20** are also indefinite because it is not clear what structure is being used to provide the means.

#### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. **Claims 1-2, 5-10, 12-14, 15-16, 18-20, 21-22 and 24-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hundscheidt et al. (US Pg Pub 2005/0007969), hereinafter referred to as Hundscheidt, in view of Tsao et al. ("Improving Packet Delivery in GPRS/UMTS

Networks”), hereinafter referred to as Tsao, and Casati et al. (US Pg Pub 2003/0039232), hereinafter referred to as Casati.

12. For **claims 1, 9, 15 and 21**, Hundscheidt discloses a GGSN that establishes a PDP context with a MS (end user) over a GPRS network **[0039, figure 7]**. Hundscheidt’s GGSN performs the functions of a multicast router by terminating IGMP or MLD messages. The termination of these messages allows the GGSN to recognize which multicast group(s) (designated multicast service group) an end user is a member of by keeping track of the active group memberships **[0076-0077]**. The GGSN also sends IGMP Membership Report messages to routers (network elements) to inform the routers that the GGSN has at least one member of a multicast group that needs to receive multicast data **[0100]**. Hundscheidt’s GGSN receives multicast data from the routers (network elements) **[0130, figure 13]**.

13. Hundscheidt discloses the use of PDP contexts (signaling information). Hundscheidt does not disclose using an APN in a PDP context. Tsao discloses a PDP context that includes an APN. The APN in Tsao’s invention is used to identify the mobile stations (end users) in the network **[page 2026, next to last paragraph in the left column, figure 4]**. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use Tsao's APN in Hundscheidt’s invention to improve the delivery of packets **[Tsao, title]**.

14. Hundscheidt discloses the use of multicasting. Hundscheidt does not disclose using an APN to identify multicast groups. Casati discloses APNs, which are contained in PDP messages, are used to associate (correlate) mobile stations (end users) to a multicast group. Once a determination of the association is made, the mobile station receives multicast messages for the particular multicast group **[0009-0010, 0027]**. It would have been obvious to a person of

ordinary skill in the art at the time of the invention to associate APNs with multicast groups in Hundscheidt's invention to provide a more efficient home network for end users [**Casati, 0010**].

15. For **claim 2**, Hundscheidt discloses a table included within the GGSN and operable to store the correlation between the end user and the multicast service group associated with the end user (see paragraph 89 lines 21-25).

16. For **claim 5**, Hundscheidt further teaches the one or more of the multicast services is provided in a selected one of an audio stream format and a video stream format (see paragraph 20 lines 1-3; Multimedia, which includes an audio and video stream, is multicasted via an IP network.).

17. For **claim 6**, Hundscheidt further teaches the GGSN is further operable to perform joining and leaving operations associated with the end user joining and leaving one or more multicast service group communication sessions (see paragraph 89 lines 7-14 and paragraph 103 lines 1-5).

18. For **claim 7**, Hundscheidt further teaches the GGSN is further operable to forward IP multicast traffic associated with the multicast service group to the end user (see paragraph 76 lines 1-10).

19. For **claim 8**, Hundscheidt further teaches the GGSN is further operable to replicate one or more packets and to deliver the packets to one or more communication tunnels associated with one or more end users that belong to the multicast service group (see paragraph 42 lines 1-7).

20. For **claims 10, 16, and 22**, Hundscheidt further teaches storing the correlation between the end user and the multicast service group associated with the end user in a table (see paragraph 89 lines 10-14).

Art Unit: 2419

21. For **claims 12, 18, and 24**, Hundscheidt further teaches performing joining and leaving operations associated with the end user joining and leaving one or more multicast service group communication sessions (see paragraph 89 lines 7-14 and paragraph 103 lines 1-5).

22. For **claims 13, 19, and 25**, Hundscheidt further teaches forwarding IP multicast traffic associated with the multicast service group to the end user (see paragraph 76 lines 1-10).

23. For **claims 14, 20, and 26**, Hundscheidt further teaches replicating one or more packets associated with a selected one of the multicast services; and delivering the packets to one or more communication tunnels associated with one or more end users that belong to the multicast service group (see paragraph 42 lines 1-7).

### ***Response to Arguments***

24. Applicant's arguments with respect to **claims 1-2, 5-10, 12-14, 15-16, 18-20, 21-22 and 24-26** have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY M. RUTKOWSKI whose telephone number is (571)270-1215. The examiner can normally be reached on Monday - Friday 7:30-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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10/10/2008

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